

### REMARKS

Claims 19-28, and 30-55 are presented for the Examiner's review and consideration. Claims 19 and 41 have been amended without prejudice, and new claims 42-55 are presented for the Examiner's review and consideration. No new matter has been added, as the amendments are supported by the specification as originally filed.

Applicants appreciate the courtesies extended by Examiner Clark F. Dexter during an interview on March 17, 2001. The following comments are believed to accurately reflect the discussion during the interview concerning the Office Action and the references cited therein. A model of the device shown in FIG. 2a was provided for the Examiner's inspection and differences between the device and United States Patent 955,287 ("Schofield") were discussed. Claims 19, 30, 40, and 41 were discussed. Applicants presented the following points: (1) the wire cutter of Schofield does not disclose, teach or suggest tapered slots as required by independent claims 30 and 40; and (2) the wire cutter of Schofield does not disclose, teach, or suggest a device having cutting edges which apply a torsional shearing force as required by claims 30 and 41. The Examiner stated that the slots of Schofield appear to have a slight taper, and if not, such a modification would be obvious to facilitate receiving the work piece. Additionally, other features of Schofield were discussed, including the pivot joint at the center of the jaws.

In the Office Action, claims 19, 20, 22-28 and 41 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 955,287 to Schofield ("Schofield"). The Examiner stated:

"Schofield discloses a cutting assembly with every structural limitation of the claimed invention including a first shearing element (e.g., 1) comprising a handle (e.g., 3) and a second shearing element (e.g., 2) comprising a handle (e.g., 4), wherein each slot has opposing cutting edges (i.e., they face in opposite direction)." (Office Action, December 18, 2002, page 3, lines 8-11.)

Independent claim 19 has been amended without prejudice to recite, *inter alia*, the first shearing element is separate and unconnected from the second shearing element and independently movable thereof. Schofield discloses a wire cutter having two jaws with each jaw having a diagonal slot. (Schofield, lines 24-34). The jaws "are pivotally secured together by a central pintle 5." (*Id.*, lines 27-29). As Schofield fails to disclose, teach or suggest a bone plate cutting assembly comprising a first shearing element and a second shearing element wherein the first shearing element is separate and unconnected from the second shearing element and independently movable thereof, as recited in claim 19, Applicants respectfully submit that the rejection of claim 19 under 35 U.S.C. §102(b) should be withdrawn.

With respect to claims 20-28, which depend from independent claim 19, applicants submit that because these claims define more particular aspects of applicants' invention in addition to the features and elements of independent claim 19, these claims are also patentably distinct from Schofield for the same reasons as claim 19, as well as the

additional features of claims 20-28. As the features and elements recited in claims 20-28 are not disclosed, suggested or taught by Schofield, applicants respectfully request that the rejection of claims 20-28 under 35 U.S.C. §102(b) be withdrawn.

Claims 30-40 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious over Schofield. Claim 30 requires, *inter alia*, a first head attached to the handle and having upper, lower, and side surfaces, and a slot through the upper and lower surfaces with a bevelled cutting edge thereon, the slot having fixed dimensions and extending from the side surface and tapering from the side surface toward an interior of the first head. Schofield discloses a wire cutter with jaws provided at intervals with diagonal slots. (Schofield, lines 29-30). The diagonal arrangement of the slots produces a sharp cutting edge 8 on the jaw 1 adjacent to the jaw 2 and a sharp cutting edge 9 on the jaw 2 adjacent to the jaw 1. (*Id.*, lines 39-43). The relation of the two slots 6 and 7 is such that the wire passing through the slots transverse to the plane of the cutting jaws, will have a certain space 10 in the jaw 1 overlapping the edge 8 and a space 11 in the jaw 2 overlapping the edge 9, thereby leaving the edges 8 and 9 perfectly free to enter the wire at the very beginning of the cut. (*Id.*, lines 47-55). The specification of Schofield is silent with regard to providing any further structure to the diagonal slots. The specification of Schofield does not identify, describe, or suggest a tapered slot as recited by claim 30. The drawings of Schofield, moreover, do not show a taper as required by claim 30. Thus, each and every limitation of claim 30 is not expressly disclosed, suggested or taught by Schofield.

Moreover, "Inherency" requires two distinct showings: first, that the inherent characteristic necessarily be present in the prior art reference; and second, that such characteristic would have been recognized by persons of ordinary skill in the art at that time. *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991); *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995). As stated by MPEP § 2112:

"The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993). . . . "To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" *In re Robinson*, 169 F. 3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). . . . "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (Emphasis in original)." (MPEP, p. 2100-52).

The rejection of claim 30 under 35 U.S.C. § 102(b) does not provide a basis in fact and/or technical reasoning to support the determination that Schofield necessarily discloses tapered slots as recited by claim 30. As previously described, the specification of Schofield does not identify, describe, or suggest a tapered slot as recited by claim 30, and the drawings of Schofield do not show a taper. Thus, the wire cutter of Schofield does not require tapered slots, and therefore does not necessarily possess the limitations of claim 30, which are required to support a showing of inherency. Accordingly, each and every limitation of claim 30 is not inherently disclosed, suggested or taught by Schofield.

For these reasons, applicants respectfully submit that the rejection of claim 30 under 102(b) has been overcome and should be withdrawn.

Claim 30 was also rejected, "in the alternative," under 35 U.S.C. § 103(a) as obvious over Schofield. Applicants respectfully disagree and traverse. The rejection stated:

"[I]f it is argued that Schofield does not disclose tapered slots, the Examiner takes Official notice that it is old and well known in the art to at least slightly taper the slots to facilitate the workpiece. Therefore, it would have been obvious to one having ordinary skill in the art to provide at least a slight taper to the slots of Schofield for the well known benefits including those described above." (Office Action, December 13, 2003, pp. 3-4).

As an initial matter, the rejection failed to point to some concrete evidence in the record in support of the examiner's finding of Official notice. As stated in MPEP § 2144.03:

It is never appropriate to rely solely on "common knowledge" in the art without evidentiary support in the record, as principle evidence upon which upon which a rejection is based. *Zurko*, 258 F.3d at 1385, 59 USPQ2d at 1697 ("[T]he Board cannot simply reach conclusions based on its own understanding or experience -- or on an assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of these findings."). . . . See also *In re Lee*, 277 F. 3d 1338, 1344-45, 61 USPQ2d 1430, 1434-35 (Fed. Cir. 2002) (In reversing the Board's decision, the court stated "'common knowledge and common sense' " on which the board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as those here provided do not fulfill the agency's obligation. . . . The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies."). (MPEP 2144.03, p. 2100-132).

The rejection of claim 30 under 35 U.S.C. § 103(a) improperly relied on conclusory statements and common knowledge in the art without evidentiary support in the record as the principle evidence upon which the rejection was based.

Additionally, Schofield teaches away from the rationale used to support the obviousness rejection of claim 30. Schofield teaches a spring 19 for pushing apart handles 12 and 13 to expand the clear opening between the slots of the wire cutter to facilitate placement of a wire for cutting. (Schofield, lines 73-81). The handles are further adapted to

prevent the handles from opening beyond a predetermined position under the spring. (*Id.*, lines 67-73). Thus, there is no need or motivation for providing a wider opening for receiving the work piece, since the wire cutter is expressly designed to have a limited opening through the diagonal slots.

For these reasons, there is no motivation to modify the wire cutter of Schofield; there is no motivation to modify the slots of Schofield to provide a taper; and the only possible motivation for modifying the device of Schofield as stated in the rejection is impermissible hindsight. Thus, the rejection of claim 30 under 35 U.S.C. § 103(a) was improper, has been overcome, and should be withdrawn.

With respect to claims 31-39, which depend from independent claim 30, applicants submit that because these claims define more particular aspects of applicants' invention in addition to the features and elements of independent claim 30, these claims are also patentably distinct from Schofield for the same reasons as claim 30, as well as the additional features of claims 31-39. As the features and elements recited in claims 31-39 are not disclosed, suggested or taught by Schofield, applicants respectfully submit that the rejection of claims 31-39 under 35 U.S.C. §102(b) or 35 U.S.C. §103(a) have been overcome and should be withdrawn.

Independent claim 40 recites, *inter alia*, a first head attached to the handle and having a front face, a back face having a surface a portion of which is substantially flat and at least one outer surface, the first head having a slot of fixed dimensions through the front and back faces and extending from the outer surface toward an interior of the first head, the slot defining opposing faces, at least one of such opposing faces tapering from the front face towards the back face such that the distance between the opposing faces at the front face is greater than the distance between the opposing faces at the back face. For the reasons set forth with respect to claim 30, applicants submit that Schofield does not disclose, teach, or suggest the tapered slot recited by claim 40. Accordingly, applicants respectfully submit that the rejection of claim 40 under 35 U.S.C. §102(b) or 35 U.S.C. §103(a) have been overcome and should be withdrawn.

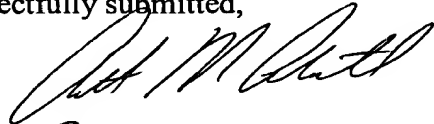
Independent claim 41 has been amended without prejudice to recite, *inter alia*, a first head attached to the handle and having a front face, a back face, and at least one outer surface, the first head having a slot through the front and back faces and extending from the outer surface towards an interior of the first head, the slot extending at least about half-way across the back face. Independent claim 41 has also been amended without prejudice to recite, *inter alia*, that rotation of the first and second heads counter to one another about an axis of rotation with the heads directly touching each other at the cutting edges applies a torsional shearing force on the bone plate and the axis of rotation is located within at least one of the slots. As Schofield fails to disclose, teach or suggest a slot or an axis of rotation as recited in claim 41, Applicants respectfully submit that the rejection of claim 41 under 35 U.S.C. §102(b) should be withdrawn.

New independent claim 51 recites, *inter alia*, a bone plate cutting assembly wherein each slot has two beveled cutting edges. Schofield discloses a wire cutter having two jaws with each jaw having a slot with one cutting edge. (Schofield, lines 37-46). The device of Schofield has only one cutting edge on each slot, and therefore Schofield fails to disclose, teach or suggest an apparatus having all the limitations recited in new claim 51. Accordingly, claim 51 is patentable over Schofield.

In view of the foregoing amendments and remarks, it is submitted that all rejections have been overcome and should be withdrawn, and thus all claims are in condition for allowance. Reconsideration of the application in view of the foregoing amendments and remarks is respectfully requested.

Applicants believe that fees are due in connection with the submission of this amendment as calculated on the attached Fee Transmittal Sheet. Should any other fees be required, please charge all required fees under 37 C.F.R. 1.17 to Pennie & Edmonds Deposit Account No. 16-1150.

Respectfully submitted,



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Enclosures



Amendment in response to Office Action dated 12/18/2002

Serial No.:	08/659,046	Pennie & Edmonds, LLP:	(202) 496-4400
Filed:	June 3, 1996	Attorney Docket:	8932-309
Inventor:	P. BAUER <i>et al.</i>	Date:	April 18, 2003
For:	METHOD AND APPARATUS FOR CUTTING BODIES HAVING NON- CIRCULAR CROSS-SECTION	Appendix A:	1 of 2

### APPENDIX A

Claims pending in the application: 19, 20, 22-28, and 30-55

Claims rejected: 19, 20, 22-28, and 30-41

### MARKED UP VERSION OF CLAIMS

19. (Twice amended) A bone plate cutting assembly for shearing by transverse forces a bone plate having a non-circular cross-section and a longitudinal axis, comprising:

- a first shearing element comprising
  - a handle for manipulation of the first shearing element; and
  - a first head attached to the handle and having a front face, a back face, and at least one outer surface, the first head having a slot through the front and back faces and extending from the outer surface towards an interior of the first head; and
- a second shearing element comprising
  - a handle for manipulation of the second shearing element; and
  - a second head attached to the handle and having a front face, a back face, and at least one outer surface, the second head having a slot through the front and back faces and extending from the outer surface towards an interior of the second head;

wherein the first shearing element is separate and unconnected from the second shearing element and independently movable thereof, and each slot has at least one bevelled cutting edge, and the first and second heads contact one another as the first and second heads rotate counter to one another so that the cutting edges apply a shearing force on opposite sides of the bone plate.

41. (Twice amended) A bone plate cutting assembly for shearing by transverse forces a bone plate having a non-circular cross-section and a longitudinal axis, comprising:

- a first shearing element comprising
  - a handle for manipulation of the first shearing element; and
  - a first head attached to the handle and having a front face, a back face, and at least one outer surface, the first head having a slot through the front and back faces and extending from the outer surface towards an interior of the first head, the slot extending across about one-half the back face; and
- a second shearing element comprising
  - a handle for manipulation of the second shearing element; and

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a second head attached to the handle and having a front face, a back face, and at least one outer surface, the second head having a slot through the front and back faces and extending from the outer surface towards an interior of the second head;

wherein the first and second slots define opposing faces and at least one opposing face of each set of opposing faces intersects the back face of the shearing element to form a bevelled cutting edge and wherein rotation of the first and second heads counter to one another about an axis of rotation with the heads directly touching each other at the cutting edges applies a torsional shearing force on the bone plate and the axis of rotation is selectively located within the first slot.